

Abstract

The present invention sets forth a method for performing packet combined scheduling of dedicated transport channels for packet services in UMTS downlinks, comprising the following steps: a) prior to each DCH scheduling period, performing pre-selection processing of a transport format combination of each DPCH according to the predetermined restriction conditions for the DCH combined packet scheduling, so as to determine a usable transport format combination set for each DPCH; b) restricting a total downlink transmit power of DCHs for NRT packet services to a schedulable power not exceeding a schedulable power value in the estimation of a total downlink power during said scheduling period; c) based on the fairness of DCH transportation and the QoS requirements of the DCH-borne services, determining weighted values which the respective DCHs correspond to in the optimization of the DCH combined packet scheduling; and d) based on the results of steps a), b), and c), calculating the maximum number of bits which each DCH is schedulable to output, using a 0-1 programming algorithm. The present invention guarantees the fairness, priority and QoS (Quality of Service) of different DCHs and can achieve maximum total data throughput.